

**8-133**

Note: Appendix added November 25, 1997, effective July 1, 1998

## Section 1: Ratios and Ratio Terms

$$\text{Primary Reserve Ratio} = \frac{\text{Expendable Net Assets}}{\text{Total Expenses}}$$

$$\text{Equity Ratio} = \frac{\text{Modified Net Assets}}{\text{Modified Assets}}$$

$$\text{Net Income Ratio} = \frac{\text{Change in Unrestricted Net Assets}}{\text{Total Unrestricted Revenue}}$$

### Definitions:

Expendable Net Assets = (unrestricted net assets) + (temporarily restricted net assets) - (annuities, term endowments, and life income funds that are temporarily restricted) - (intangible assets) - (net property, plant and equipment)\* + (post-employment and retirement liabilities) + (all debt obtained for long-term purposes)\*\*

Total Expenses is total unrestricted expenses taken directly from the audited financial statement

Modified Net Assets = (unrestricted net assets) + (temporarily restricted net assets) + (permanently restricted net assets) - (intangible assets) - (unsecured related-party receivables)

Modified Assets = (total assets) - (intangible assets) - (unsecured related-party receivables)

Change in Unrestricted Net Assets is taken directly from the audited financial statement

Total Unrestricted Revenue is taken directly from the audited financial statement (This amount includes net assets released from restriction during the fiscal year)

\* The value of plant, property and equipment is net of accumulated depreciation, including capitalized lease assets.

\*\* The value of all debt obtained for long-term purposes includes the short-term portion of the debt, up to the amount of net property, plant and equipment.

## Section 2, Calculating the Ratios from the Balance Sheet and Statement of Activities

	Balance Sheet	Statement of Activities	column:	a	b
c	d				

Line		
1	Cash and Cash Equivalents	\$ 1,000,000
2	Accounts Receivable	6,000,000
3	Prepaid Expenses	1,500,000
4	Inventories	500,000
5	Contributions Receivable	2,000,000
6	Student Loans Receivable	8,000,000
7	Investments	6,000,000
8	Property and Equipment, net	50,000,000
9	Bond Insurance Costs	720,000
10	Goodwill	500,000
11	Deposits	20,000
12	<b>Total Assets</b>	<b>76,240,000</b>
13	Line of Credit	\$ 500,000
14	Accounts Payable	2,000,000
15	Accrued Expenses	3,500,000
16	Deferred Revenue	650,000
17	Post-Retirement Benefits Liability	6,600,000
18	Bonds Payable	36,000,000
19	<b>Total Liabilities</b>	<b>49,250,000</b>
20	<b>Unrestricted Net Assets</b>	<b>15,190,000</b>
21	Annuities	300,000
22	John Doe Scholarship Fund	2,500,000
23	<b>Total Temp. Restricted Net Assets</b>	<b>2,800,000</b>
24	<b>Permanent Restr. Net Assets</b>	<b>9,000,000</b>
25	<b>Total Net Assets</b>	<b>26,990,000</b>
26	<b>Total Liabilities &amp; Net Assets</b>	<b>76,240,000</b>

Line		Unrestricted	Temporarily Restricted	Permanently Restricted	Total
27	Tuition and Fees	\$ 45,000,000			\$ 45,000,000
28	Contributions	1,200,000	\$ 300,000	\$ 120,000	1,620,000
29	Auxiliary Enterprises	5,500,000			5,500,000
30	Net Assets Released from Restrictions	200,000			200,000
31	<b>Total Revenue</b>	<b>51,900,000</b>	<b>300,000</b>	<b>120,000</b>	<b>52,320,000</b>
32	Operating Expenses	38,000,000			38,000,000
33	Depreciation	5,000,000			5,000,000
34	Interest Expense	2,880,000			2,880,000
35	Auxiliary Enterprises	5,200,000			5,200,000
36	Non-Operating Expenses	900,000			900,000
37	Net Assets Released from Restrictions		200,000	---	200,000
38	<b>Total Expenses</b>	<b>51,980,000</b>	<b>200,000</b>	<b>---</b>	<b>52,180,000</b>
39	<b>Change in Net Assets</b>	<b>(80,000)*</b>	<b>100,000</b>	<b>120,000</b>	<b>140,000</b>
40	Net Assets at beginning of year	15,270,000	2,700,000	8,880,000	26,850,000
41	Net Assets at end of year	15,190,000	2,800,000	9,000,000	26,990,000

$$\text{Primary Reserve Ratio} = (\text{lines } 20+23-21-10-8+18^{**}+17) / 38a = \$ 9,790,000 / 51,980,000 = 0.188$$

$$\text{Equity Ratio} = (\text{lines } 25-10) / 12-10 = \$26,490,000 / 75,740,000 = 0.350$$

$$\text{Net Income Ratio} = (\text{lines } 39a) / 31a = \$ (80,000) / 51,900,000 = (0.0015)$$

\* In accounting statements, parentheses denote negative numbers (i.e., (80,000) equals negative 80,000).

\*\*Long-Term Debt (line 18) cannot exceed Property and Equipment, net (line 8) in this formula.

### Section 3: Calculating the Composite Score

Step 1: Calculate the strength factor score for each ratio, by using the following algorithms

#### Example (for Private Non-Profit Institutions)

Primary Reserve strength factor score =  $10 \times$  Primary Reserve ratio result:  $10 \times 0.188 = 1.880$

Equity strength factor score =  $6 \times$  Equity ratio result:  $6 \times 0.350 = 2.100$

Because the Net Income ratio result is negative, the algorithm for negative net income is used--Net Income strength factor

score =  $1 + (25 \times \text{Net Income ratio result})$ :  $1 + (25 \times -0.0015) = 0.963$

(Note: If the Net Income ratio result is positive, the following algorithm is used,

Net Income strength factor score =  $1 + (50 \times \text{Net Income ratio result})$  --

If the Net Income ratio result is 0, the Net Income strength factor score is 1).

If the strength factor score for any ratio is greater than or equal to 3, the strength factor score for that ratio is 3. If the strength factor score for any ratio is less than or equal to -1, the strength factor score for that ratio is -1.

Step 2: Calculate the weighted score for each ratio and calculate the composite score by adding the three weighted scores

Primary Reserve weighted score =  $40\% \times$  Primary Reserve strength factor score:  $0.40 \times 1.880 = 0.752$

Equity weighted score =  $40\% \times$  Equity strength factor score:  $0.40 \times 2.100 = 0.840$

Net Income weighted score =  $20\% \times$  Net Income strength factor score:  $0.20 \times 0.963 = 0.193$

Composite score = sum of all weighted scores:  $.752 + 0.840 + 0.193 = 1.785$

Round the composite score to one digit after the decimal point to determine the final score: 1.8

\* The symbol "x" denotes multiplication.